

What is claimed is:

1. A computer telephony integration control system for performing computer telephony integration control
5 to control a connection of an exchange circuit terminated by an exchange unit, comprising:

a computer telephony integration client unit for transmitting computer telephony integration control request information for use in requesting the computer
10 telephony integration control; and

a computer telephony integration server unit,
connected to a computer network accessible by said computer telephony integration client unit, for receiving the computer telephony integration control
15 request information from said computer telephony integration client unit, and performing the computer telephony integration control on the exchange unit according to the computer telephony integration control request information.

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2. The system according to claim 1, wherein said computer telephony integration server unit comprises:

first communications control means for
25 communicating the computer telephony integration

control request information and information relating to the computer telephony integration control request information with said computer telephony integration client unit through the computer network;

5 computer telephony integration control execution means for receiving the computer telephony integration control request information from said computer telephony integration client unit through the computer network and said first communications control
10 means, generating exchange request information for use in requesting the exchange unit to perform the computer telephony integration control according to the computer telephony integration control request information, and performing the computer telephony
15 integration control on the exchange unit based on the generated information; and

 exchange-unit communications means for communicating with the exchange unit the exchange request information transmitted by said computer
20 telephony integration control execution means and information relating to the exchange request information.

3. The system according to claim 1, wherein
25 said computer telephony integration client unit

comprises:

computer telephony integration control
request information editing means for editing computer
telephony integration control request information for
5 use in requesting the computer telephony integration
control; and

second communications control means for
communicating the computer telephony integration
control request information and information relating
10 to the computer telephony integration control request
information with said computer telephony integration
server unit through the computer network.

4. The system according to claim 1, wherein
15 said computer telephony integration control
request information contains information specifying
issue/non-issue of a result notification and
information specifying a monitor time; and

when information specifying issue of the result
20 notification is set in the computer telephony
integration control request information, said computer
telephony integration server unit returns a
notification as to whether or not the computer
telephony integration control has been successfully
25 performed within the monitor time set in the computer

telephony integration control request information.

5. The system according to claim 1, wherein

5 said computer telephony integration control
request information is additional connection request
information for use in requesting an additional
connection to communications which have already been
connected;

10 said computer telephony integration server unit
comprises:

extension termination means for terminating
two or more extensions connected to said exchange
unit; and

15 additional connection control means for
receiving the additional connection request
information from said computer telephony integration
client unit through the computer network, instructing
the exchange unit to connect according to the
additional connection request information an optional
20 first extension in the extensions during the
communications being established, instructing the
exchange unit to connect a second extension which is
another optional extension of the extensions to a
terminal unit specified according to the additional
25 connection request information, and instructing said

extension termination means to connect the first and second extensions.

6. The system according to claim 1, wherein

5 said computer telephony integration control request information is interruptive connection request information for use in requesting an interruptive connection to communications which have already been connected with one of communicating terminal units set
10 in a suspended state;

 said computer telephony integration server unit comprises:

 extension termination means for terminating two or more extensions connected to said exchange
15 unit; and

 interruptive connection control means for receiving the interruptive connection request information from said computer telephony integration client unit through the computer network, instructing
20 the exchange unit to connect according to the interruptive connection request information an optional first extension in the extensions to the communications being established, instructing the exchange unit to hold one of communicating terminal
25 units, instructing the exchange unit to connect a

second extension which is another optional extension of the extensions to a terminal unit specified according to the interruptive connection request information, and instructing said extension
5 termination means to connect the first and second extensions.

7. The system according to claim 1, wherein
said computer telephony integration control
10 request information is transfer control request information for use in requesting a call transfer entry or release for an optional destination terminal unit; and

said computer telephony integration server unit
15 comprises:

extension termination means for terminating two or more extensions connected to said exchange unit; and

transfer connection control means for
20 entering or releasing transfer control information for the optional destination terminal unit according to the transfer control request information when the transfer control request information is received from said computer telephony integration client unit
25 through a computer network, instructing the exchange

unit according to the transfer control request information to output a destination specification request for requesting the specification of a destination when a call is issued to the optional destination terminal unit, instructing the exchange unit to specify a first optional extension in the extensions as the call destination unit when the destination specification request is output from the exchange unit, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified according to the transfer connection request information, and instructing said extension termination means to connect the first and second extensions.

8. The system according to claim 1, wherein said computer telephony integration control refers to two-point connection control to connect a source terminal unit capable of issuing a call from the exchange unit to a destination terminal unit.

9. The system according to claim 8, wherein said two-point connection control is periodically performed until the destination terminal unit answers.

10. The system according to claim 8, wherein
said two-point connection control is performed
upon receipt of a call release notification indicating
that the destination terminal unit is ready.

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11. The system according to claim 1, wherein
said source terminal unit and said destination
terminal unit communicate with each other through the
exchange unit and a switching network to which the
10 exchange unit is connected.

12. The system according to claim 1, wherein
said source terminal unit and said destination
terminal unit are connected to the exchange unit and
15 communicate with each other through an extension
network controlled by the exchange unit.

13. The exchange unit used in the computer telephony
integration control system according to claim 1.

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14. A computer telephony integration control system
for performing computer telephony integration control
to control a connection of an exchange circuit
terminated by an exchange unit, comprising:

25 a computer telephony integration client unit for

transmitting computer telephony integration control request information for use in requesting the computer telephony integration control; and

5 a computer telephony integration server unit, connected to a computer network accessible by said computer telephony integration client unit, for receiving the computer telephony integration control request information from said computer telephony integration client unit in an area under control of
10 said computer telephony integration server unit, performing the computer telephony integration control on the exchange unit according to the computer telephony integration control request information when the computer telephony integration control request
15 information is to be processed by said computer telephony integration server unit, and transferring the computer telephony integration control request information to another computer telephony integration server unit which is to process the computer telephony
20 integration control request information when the computer telephony integration control request information is not to be processed by said computer telephony integration server unit.

25 15. The system according to claim 14, further

comprising:

a computer telephony integration database unit
for storing, for each destination number, host address
information in the computer network of the computer
5 telephony integration server unit for processing the
computer telephony integration control request
information containing the destination number, wherein
when said computer telephony integration server
unit is not to process the computer telephony
10 integration control request information, said computer
telephony integration server unit obtains host address
information corresponding to another computer
telephony integration server unit which is to process
the computer telephony integration control request
15 information by accessing said computer telephony
integration database unit based on a destination
number contained in the computer telephony integration
control request information, and transmits the
computer telephony integration control request
20 information to a destination according to the host
address information.

16. The system according to claim 14, wherein
said computer telephony integration server unit
25 comprises:

first communications control means for communicating the computer telephony integration control request information and information relating to the computer telephony integration control request
5 information with said computer telephony integration client unit through the computer network;

computer telephony integration control execution means for receiving the computer telephony integration control request information from said
10 computer telephony integration client unit through the computer network and said first communications control means, generating exchange request information for use in requesting the exchange unit to perform the computer telephony integration control according to
15 the computer telephony integration control request information, and performing the computer telephony integration control on the exchange unit based on the generated information; and

exchange-unit communications means for
20 communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution means and information relating to the exchange request information.

17. The system according to claim 14, wherein
said computer telephony integration client unit
comprises:

computer telephony integration control
5 request information editing means for editing computer
telephony integration control request information for
use in requesting the computer telephony integration
control; and

second communications control means for
10 communicating the computer telephony integration
control request information and information relating
to the computer telephony integration control request
information with said computer telephony integration
server unit through the computer network.

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18. The system according to claim 14, wherein
said computer telephony integration control
request information contains information specifying
issue/non-issue of a result notification and
20 information specifying a monitor time; and

when information specifying issue of the result
notification is set in the computer telephony
integration control request information, said computer
telephony integration server unit returns a
25 notification as to whether or not the computer

telephony integration control has been successfully performed within the monitor time set in the computer telephony integration control request information.

5 19. The system according to claim 14, wherein

said computer telephony integration control request information is additional connection request information for use in requesting an additional connection to communications which have already been connected;

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said computer telephony integration server unit comprises:

extension termination means for terminating two or more extensions connected to said exchange unit; and

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additional connection control means for receiving the additional connection request information from said computer telephony integration client unit through the computer network, instructing the exchange unit to connect according to the additional connection request information an optional first extension in the extensions during the communications being established, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a

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terminal unit specified according to the additional connection request information, and instructing said extension termination means to connect the first and second extensions.

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20. The system according to claim 14, wherein

said computer telephony integration control request information is interruptive connection request information for use in requesting an interruptive connection to communications which have already been connected with one of communicating terminal units set in a suspended state;

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said computer telephony integration server unit comprises:

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extension termination means for terminating two or more extensions connected to said exchange unit; and

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interruptive connection control means for receiving the interruptive connection request information from said computer telephony integration client unit through the computer network, instructing the exchange unit to connect according to the interruptive connection request information an optional first extension in the extensions to the communications being established, instructing the

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exchange unit to hold one of communicating terminal units, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified
5 according to the interruptive connection request information, and instructing said extension termination means to connect the first and second extensions.

10 21. The system according to claim 14, wherein
said computer telephony integration control request information is transfer control request information for use in requesting a call transfer entry or release for an optional destination terminal
15 unit; and

said computer telephony integration server unit comprises:

extension termination means for terminating two or more extensions connected to said exchange
20 unit; and

transfer connection control means for entering or releasing transfer control information for the optional destination terminal unit according to the transfer control request information when the
25 transfer control request information is received from

said computer telephony integration client unit through a computer network, instructing the exchange unit according to the transfer control request information to output a destination specification request for requesting the specification of a destination when a call is issued to the optional destination terminal unit, instructing the exchange unit to specify a first optional extension in the extensions as the call destination unit when the destination specification request is output from the exchange unit, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified according to the transfer connection request information, and instructing said extension termination means to connect the first and second extensions.

22. The system according to claim 14, wherein said computer telephony integration control refers to two-point connection control to connect a source terminal unit capable of issuing a call from the exchange unit to a destination terminal unit.

23. The system according to claim 22, wherein

said two-point connection control is periodically performed until the destination terminal unit answers.

24. The system according to claim 22, wherein

5 said two-point connection control is performed upon receipt of a call release notification indicating that the destination terminal unit is ready.

25. The system according to claim 14, wherein

10 said source terminal unit and said destination terminal unit communicate with each other through the exchange unit and a switching network to which the exchange unit is connected.

15 26. The system according to claim 14, wherein

 said source terminal unit and said destination terminal unit are connected to the exchange unit and communicate with each other through an extension network controlled by the exchange unit.

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27. The exchange unit used in the computer telephony integration control system according to claim 14.

28. A computer telephony integration server unit for
25 receiving computer telephony integration control

request information from a computer telephony integration client unit, and performing computer telephony integration control to control a connection of an exchange circuit which terminates an exchange unit according to the computer telephony integration control request information, comprising:

first communications control means for communicating the computer telephony integration control request information and information relating to the computer telephony integration control request information with said computer telephony integration client unit through a computer network;

computer telephony integration control execution means for receiving the computer telephony integration control request information from said computer telephony integration client unit through the computer network and said first communications control means, generating exchange request information for use in requesting the exchange unit to perform the computer telephony integration control according to the computer telephony integration control request information, and performing the computer telephony integration control on the exchange unit based on the generated information; and

exchange-unit communications means for

communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution means and information relating to the exchange request
5 information.

29. The system according to claim 28, wherein
said computer telephony integration control request information contains information specifying
10 issue/non-issue of a result notification and information specifying a monitor time; and

when information specifying issue of the result notification is set in the computer telephony integration control request information, said computer
15 telephony integration server unit returns a notification as to whether or not the computer telephony integration control has been successfully performed within the monitor time set in the computer telephony integration control request information.

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30. The system according to claim 28, wherein
said computer telephony integration control refers to two-point connection control to connect a source terminal unit capable of issuing a call from
25 the exchange unit to a destination terminal unit.

31. The system according to claim 30, wherein
said two-point connection control is periodically
performed until the destination terminal unit answers.

5 32. The system according to claim 30, wherein
said two-point connection control is performed
upon receipt of a call release notification indicating
that the destination terminal unit is ready.

10 33. The system according to claim 28, wherein
said source terminal unit and said destination
terminal unit communicate with each other through the
exchange unit and a switching network to which the
exchange unit is connected.

15 34. The system according to claim 28, wherein
said source terminal unit and said destination
terminal unit are connected to the exchange unit and
communicate with each other through an extension
20 network controlled by the exchange unit.

35. The exchange unit used in the computer telephony
integration control system according to claim 28.

25 36. A computer telephony integration client unit for

transmitting computer telephony integration control request information for use in requesting computer telephony integration control to a computer telephony integration server unit, comprising:

5 computer telephony integration control request information editing means for editing the computer telephony integration control request information; and
communications control means for communicating
with the computer telephony integration server unit
10 through a computer network the computer telephony integration control request information and information relating to the computer telephony integration control request information.

15 37. The system according to claim 36, wherein
said computer telephony integration control request information contains information specifying issue/non-issue of a result notification and information specifying a monitor time; and

20 when information specifying issue of the result notification is set in the computer telephony integration control request information, said computer telephony integration server unit returns a notification as to whether or not the computer
25 telephony integration control has been successfully

performed within the monitor time set in the computer telephony integration control request information.

38. The system according to claim 36, wherein

5 said computer telephony integration control refers to two-point connection control to connect a source terminal unit capable of releasing a call from the exchange unit to a destination terminal unit.

10 39. The system according to claim 38, wherein

 said two-point connection control is periodically performed until the destination terminal unit answers.

40. The system according to claim 38, wherein

15 said two-point connection control is performed upon receipt of a call release notification indicating that the destination terminal unit is ready.

41. The system according to claim 36, wherein

20 said source terminal unit and said destination terminal unit communicate with each other through the exchange unit and a switching network to which the exchange unit is connected.

25 42. The system according to claim 36, wherein

said source terminal unit and said destination terminal unit are connected to the exchange unit and communicate with each other through an extension network controlled by the exchange unit.

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43. The exchange unit used in the computer telephony integration control system according to claim 36.

44. An additional connection server unit for
10 receiving additional connection request information from a client unit for use in requesting an additional connection to communications which have already been connected, and controlling a connection of an exchange line terminated by an exchange unit according to the
15 additional connection request information, comprising:

extension termination means for terminating two or more extensions connected to said exchange unit; and

additional connection control means for receiving
20 the additional connection request information from said client unit through a computer network, instructing the exchange unit to connect according to the additional connection request information an optional first extension in the extensions during the
25 communications being connected, instructing the

exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified according to the additional connection request information, and instructing said
5 extension termination means to connect the first and second extensions.

45. An interruptive connection server unit for receiving interruptive connection request information
10 from a client unit for use in requesting an interruptive connection to communications which have already been connected, and controlling a connection of an exchange line terminated by an exchange unit according to the interruptive connection request
15 information, comprising:

extension termination means for terminating two or more extensions connected to said exchange unit; and

interruptive connection control means for
20 receiving the interruptive connection request information from said client unit through a computer network, instructing the exchange unit to connect according to the interruptive connection request information an optional first extension in the
25 extensions to the communications being connected,

instructing the exchange unit to hold one of communicating terminal units, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified according to the interruptive connection request information, and instructing said extension termination means to connect the first and second extensions.

10 46. A transfer control server unit for receiving transfer control request information for use in requesting an entry or release of a call from a client unit to an optional destination terminal unit, and controlling a connection of an exchange line
15 terminated by an exchange unit according to the transfer control request information, comprising:

extension termination means for terminating two or more extensions connected to said exchange unit;
and

20 transfer connection control means for entering or releasing transfer control information for the optional destination terminal unit according to the transfer control request information when the transfer control request information is received from said
25 client unit through a computer network, instructing

the exchange unit according to the transfer control request information to output a destination specification request for requesting the specification of a destination when a call is issued to the optional destination terminal unit, instructing the exchange unit to specify a first extension in the extensions as the call destination unit when the destination specification request is output from the exchange unit, instructing the exchange unit to connect a second extension which is another optional extension of the extensions to a terminal unit specified according to the transfer connection request information, and instructing said extension termination means to connect the first and second extensions.

47. A computer telephony integration control system for performing computer telephony integration control to control a connection of an exchange circuit terminated by an exchange unit, comprising:

a computer telephony integration client unit for transmitting electronic mail including exchange information for use in requesting the computer telephony integration control; and

a computer telephony integration server unit,

connected to a computer network accessible by said computer telephony integration client unit, for receiving the electronic mail including the exchange information from said computer telephony integration client unit, and performing the computer telephony integration control on the exchange unit according to the exchange information included in the electronic mail.

48. The system according to claim 47, wherein said computer telephony integration server unit comprises:

first communications control means for communicating the electronic mail including the exchange information with said computer telephony integration client unit through the computer network;

computer telephony integration control execution means for receiving the electronic mail including the exchange information from said computer telephony integration client unit through the computer network and said first communications control means, generating exchange request information for use in requesting the exchange unit to perform the computer telephony integration control according to the exchange information included in the electronic mail,

and performing the computer telephony integration control on the exchange unit based on the generated information; and

exchange-unit communications means for
5 communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution means and information relating to the exchange request information.

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49. The system according to claim 47, wherein
said computer telephony integration client unit comprises:

electronic mail editing means for editing
15 electronic mail including exchange information for use in requesting the computer telephony integration control; and

second communications control means for
communicating the electronic mail including the
20 exchange information with said computer telephony integration server unit through the computer network.

50. The system according to claim 47, wherein
said exchange information contains information
25 specifying issue/non-issue of a result notification

and information specifying a monitor time; and

when information specifying issue of the result notification is set in the exchange information, said computer telephony integration server unit returns a notification as to whether or not the computer telephony integration control has been successfully performed within the monitor time set in the exchange information.

10 51. The system according to claim 47, further comprising:

selection means for selecting, as an execution trigger for the computer telephony integration control according to exchange information contained in the electronic mail, either a user reception time at which the electronic mail is received by a user at a destination electronic mail address contained in the electronic mail, or a system recognition time at which the electronic mail is received by said computer telephony integration server unit, wherein

20 when said selection means selects the user reception time, said computer telephony integration server unit delivers the electronic mail to a mailbox of a user at a destination electronic mail address
25 contained in electronic mail upon receipt of the

electronic mail containing the exchange information from said computer telephony integration client unit, and performs the computer telephony integration control on the exchange unit according to the exchange information contained in the electronic mail when the user receives the electronic mail; and

when said selection means selects the system recognition time, said computer telephony integration server unit performs the computer telephony integration control on the exchange unit according to the exchange information contained in the electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit.

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52. The system according to claim 47, wherein

said electronic mail can contain message information about one or more media other than the exchange information; and

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said computer telephony integration server unit further comprises one or more media control means for processing a message of each medium contained in the electronic mail.

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53. The system according to claim 52, wherein

said electronic mail can contain scenario information specifying a process timing and process type of the exchange information and the message information about one or more media contained in the electronic mail; and

said computer telephony integration server unit processes the exchange information and the message information about one or more media contained in the electronic mail according to the scenario information contained in the electronic mail.

54. The system according to claim 47, wherein said computer telephony integration server unit further comprises process timing control means for controlling a process timing of the electronic mail.

55. The system according to claim 47, wherein said computer telephony integration control refers to two-point connection control to connect a source terminal unit capable of issuing a call from the exchange unit to a destination terminal unit.

56. The system according to claim 55, wherein said two-point connection control is periodically performed until the destination terminal unit answers.

57. The system according to claim 55, wherein
said two-point connection control is performed
upon receipt of a call release notification indicating
that the destination terminal unit is ready.

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58. The system according to claim 47, wherein said
source terminal unit and said destination terminal
unit communicate with each other through the exchange
unit and a switching network to which the exchange
unit is connected.

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59. The system according to claim 47, wherein
said source terminal unit and said destination
terminal unit are connected to the exchange unit and
communicate with each other through an extension
network controlled by the exchange unit.

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60. The exchange unit used in the computer telephony
integration control system according to claim 47.

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61. A computer telephony integration control system
for performing computer telephony integration control
to control a connection of an exchange circuit
terminated by an exchange unit, comprising:

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a computer telephony integration client unit for

transmitting electronic mail including exchange information for use in requesting the computer telephony integration control; and

5 a computer telephony integration server unit, connected to a computer network accessible by said computer telephony integration client unit, for receiving the electronic mail including the exchange information from said computer telephony integration client unit in an area under control of said computer
10 telephony integration server unit, performing the computer telephony integration control on the exchange unit according to the exchange information included in the electronic mail when the electronic mail is to be processed by said computer telephony integration
15 server unit, and transferring the electronic mail to another computer telephony integration server unit which is to process the electronic mail when the computer telephony integration control request information is not to be processed by said computer
20 telephony integration server unit.

62. The system according to claim 61, further comprising:

25 a destination database unit for storing host address information of the computer telephony

integration server unit in the computer network for each destination electronic mail address to process the electronic mail having the destination electronic mail address, wherein

5 when the electronic mail is not to be processed by said computer telephony integration server unit, said computer telephony integration server unit obtains host address information of another computer telephony integration server unit to process the
10 electronic mail by accessing said destination database unit based on the destination electronic mail address contained in the electronic mail, and transmits the electronic mail using the host address information as a destination address.

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63. The system according to claim 62, wherein
 said computer telephony integration server unit comprises:

 first communications control means for
20 communicating the electronic mail including the exchange information with said computer telephony integration client unit through the computer network;
 computer telephony integration control execution means for receiving the electronic mail
25 including the exchange information from said computer

telephony integration client unit through the computer network and said first communications control means, generating exchange request information for use in requesting the exchange unit to perform the computer
5 telephony integration control according to the exchange information included in the electronic mail, and performing the computer telephony integration control on the exchange unit based on the generated information; and

10 exchange-unit communications means for communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution means and information relating to the exchange request
15 information.

64. The system according to 62, wherein

said computer telephony integration client unit comprises:

20 electronic mail editing means for editing electronic mail including exchange information for use in requesting the computer telephony integration control; and

second communications control means for
25 communicating the electronic mail including the

exchange information with said computer telephony integration server unit through the computer network.

65. The system according to claim 62, wherein

5 said exchange information contains information specifying issue/non-issue of a result notification and information specifying a monitor time; and

 when information specifying issue of the result notification is set in the exchange information, said
10 computer telephony integration server unit returns a notification as to whether or not the computer telephony integration control has been successfully performed within the monitor time set in the exchange information.

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66. The system according to claim 62, further comprising:

 selection means for selecting, as an execution trigger for the computer telephony integration control
20 according to exchange information contained in the electronic mail, either a user reception time at which the electronic mail is received by a user at a destination electronic mail address contained in the electronic mail, or a system recognition time at which
25 the electronic mail is received by said computer

telephony integration server unit, wherein

when said selection means selects the user reception time, said computer telephony integration server unit delivers the electronic mail to a mailbox
5 of a user at a destination electronic mail address contained in electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit, and performs the computer telephony integration
10 control on the exchange unit according to the exchange information contained in the electronic mail when the user receives the electronic mail; and

when said selection means selects the system recognition time, said computer telephony integration
15 server unit performs the computer telephony integration control on the exchange unit according to the exchange information contained in the electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony
20 integration client unit.

67. The system according to claim 62, wherein

said electronic mail can contain message information about one or more media other than the
25 exchange information; and

said computer telephony integration server unit further comprises one or more media control means for processing a message of each medium contained in the electronic mail.

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68. The system according to claim 67, wherein

said electronic mail can contain scenario information specifying a process timing and process type of the exchange information and the message information about one or more media contained in the electronic mail; and

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said computer telephony integration server unit processes the exchange information and the message information about one or more media contained in the electronic mail according to the scenario information contained in the electronic mail.

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69. The system according to claim 62, wherein

said computer telephony integration server unit further comprises process timing control means for controlling a process timing of the electronic mail.

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70. The system according to claim 62, wherein

said computer telephony integration control refers to two-point connection control to connect a

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source terminal unit capable of issuing a call from the exchange unit to a destination terminal unit.

71. The system according to claim 70, wherein
5 said two-point connection control is periodically performed until the destination terminal unit answers.

72. The system according to claim 70, wherein
 said two-point connection control is performed
10 upon receipt of a call release notification indicating that the destination terminal unit is ready.

73. The system according to claim 62, wherein
 said source terminal unit and said destination
15 terminal unit communicate with each other through the exchange unit and a switching network to which the exchange unit is connected.

74. The system according to claim 62, wherein
20 said source terminal unit and said destination terminal unit are connected to the exchange unit and communicate with each other through an extension network controlled by the exchange unit.

25 75. The exchange unit used in the computer telephony

integration control system according to claim 62.

76. A computer telephony integration server unit for receiving exchange information from a computer
5 telephony integration client unit, and performing computer telephony integration control to control a connection of an exchange circuit which terminates an exchange unit according to the exchange information, comprising:

10 first communications control means for communicating electronic mail containing the exchange information with said computer telephony integration client unit through a computer network;

15 computer telephony integration control execution means for receiving the electronic mail containing the exchange information from said computer telephony integration client unit through the computer network and said first communications control means, generating exchange request information for use in
20 requesting the exchange unit to perform the computer telephony integration control according to the exchange information contained in the electronic mail, and performing the computer telephony integration control on the exchange unit based on the generated
25 information; and

exchange-unit communications means for communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution means and
5 information relating to the exchange request information.

77. The system according to claim 76, wherein
said exchange information contains information
10 specifying issue/non-issue of a result notification and information specifying a monitor time; and

when information specifying issue of the result notification is set in the exchange information, said computer telephony integration server unit returns a
15 notification as to whether or not the computer telephony integration control has been successfully performed within the monitor time set in the exchange information.

20 78. The system according to claim 76, further comprising:

selection means for selecting, as an execution trigger for the computer telephony integration control according to exchange information contained in the
25 electronic mail, either a user reception time at which

the electronic mail is received by a user at a destination electronic mail address contained in the electronic mail, or a system recognition time at which the electronic mail is received by said computer
5 telephony integration server unit, wherein

when said selection means selects the user reception time, said computer telephony integration server unit delivers the electronic mail to a mailbox of a user at a destination electronic mail address
10 contained in electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit, and performs the computer telephony integration control on the exchange unit according to the exchange
15 information contained in the electronic mail when the user receives the electronic mail; and

when said selection means selects the system recognition time, said computer telephony integration server unit performs the computer telephony
20 integration control on the exchange unit according to the exchange information contained in the electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit.

79. The system according to claim 76, wherein
said electronic mail can contain message
information about one or more media other than the
exchange information; and

5 said computer telephony integration server unit
further comprises one or more media control means for
processing a message of each medium contained in the
electronic mail.

10 80. The system according to claim 79, wherein
said electronic mail can contain scenario
information specifying a process timing and process
type of the exchange information and the message
information about one or more media contained in the
15 electronic mail; and

 said computer telephony integration server unit
processes the exchange information and the message
information about one or more media contained in the
electronic mail according to the scenario information
20 contained in the electronic mail.

81. The system according to claim 76, wherein
said computer telephony integration server unit
further comprises process timing control means for
25 controlling a process timing of the electronic mail.

82. The system according to claim 76, wherein
said computer telephony integration control
refers to two-point connection control to connect a
source terminal unit capable of issuing a call from
5 the exchange unit to a destination terminal unit.

83. The system according to claim 82, wherein
said two-point connection control is periodically
performed until the destination terminal unit answers.

10

84. The system according to claim 82, wherein
said two-point connection control is performed
upon receipt of a call release notification indicating
that the destination terminal unit is ready.

15

85. The system according to claim 76, wherein
said source terminal unit and said destination
terminal unit communicate with each other through the
exchange unit and a switching network to which the
20 exchange unit is connected.

86. The system according to claim 76, wherein
said source terminal unit and said destination
terminal unit are connected to the exchange unit and
25 communicate with each other through an extension

network controlled by the exchange unit.

87. The exchange unit used in the computer telephony integration control system according to claim 76.

5

88. A computer telephony integration client unit for transmitting exchange information for use in requesting computer telephony integration control to a computer telephony integration server unit, comprising:

10

electronic mail editing means for editing the electronic mail containing the exchange information;

communications control means for communicating with the computer telephony integration server unit through a computer network the electronic mail containing the exchange information.

15

89. The system according to claim 88, wherein

said exchange information contains information specifying issue/non-issue of a result notification and information specifying a monitor time; and

20

when information specifying issue of the result notification is set in the exchange information, said computer telephony integration server unit returns a notification as to whether or not the computer

25

telephony integration control has been successfully performed within the monitor time set in the exchange information.

5 90. The system according to claim 88, further comprising:

 selection means for selecting, as an execution trigger for the computer telephony integration control according to exchange information contained in the
10 electronic mail, either a user reception time at which the electronic mail is received by a user at a destination electronic mail address contained in the electronic mail, or a system recognition time at which the electronic mail is received by said computer
15 telephony integration server unit, wherein

 when said selection means selects the user reception time, said computer telephony integration server unit delivers the electronic mail to a mailbox of a user at a destination electronic mail address
20 contained in electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit, and performs the computer telephony integration control on the exchange unit according to the exchange
25 information contained in the electronic mail when the

user receives the electronic mail; and

when said selection means selects the system recognition time, said computer telephony integration server unit performs the computer telephony integration control on the exchange unit according to the exchange information contained in the electronic mail upon receipt of the electronic mail containing the exchange information from said computer telephony integration client unit.

10

91. The system according to claim 88, wherein

said electronic mail can contain message information about one or more media other than the exchange information; and

15

said computer telephony integration server unit further comprises one or more media control means for processing a message of each medium contained in the electronic mail.

20

92. The system according to claim 91, wherein

said electronic mail can contain scenario information specifying a process timing and process type of the exchange information and the message information about one or more media contained in the electronic mail; and

25

said computer telephony integration server unit processes the exchange information and the message information about one or more media contained in the electronic mail according to the scenario information
5 contained in the electronic mail.

93. The system according to claim 88, wherein
said computer telephony integration server unit further comprises process timing control means for
10 controlling a process timing of the electronic mail.

94. The system according to claim 88, wherein
said computer telephony integration control refers to two-point connection control to connect a
15 source terminal unit capable of issuing a call from the exchange unit to a destination terminal unit.

95. The system according to claim 94, wherein
said two-point connection control is periodically
20 performed until the destination terminal unit answers.

96. The system according to claim 94, wherein
said two-point connection control is performed upon receipt of a call release notification indicating
25 that the destination terminal unit is ready.

97. The system according to claim 88, wherein
said source terminal unit and said destination
terminal unit communicate with each other through the
exchange unit and a switching network to which the
5 exchange unit is connected.

98. The system according to claim 88, wherein
said source terminal unit and said destination
terminal unit are connected to the exchange unit and
10 communicate with each other through an extension
network controlled by the exchange unit.

99. The exchange unit used in the computer telephony
integration control system according to claim 88.
15

100. A computer-readable storage medium used to
direct a computer, which is a computer telephony
integration server unit for receiving computer
telephony integration control request information from
20 a computer telephony integration client unit, and
performing computer telephony integration control to
control a connection of an exchange circuit which
terminates an exchange unit according to the computer
telephony integration control request information, to
25 perform:

a first communications control function for communicating the computer telephony integration control request information and information relating to the computer telephony integration control request
5 information with said computer telephony integration client unit through a computer network; and

a computer telephony integration control execution function for receiving the computer telephony integration control request information from
10 said computer telephony integration client unit through the computer network and said first communications control function, generating exchange request information for use in requesting the exchange unit to perform the computer telephony integration
15 control according to the computer telephony integration control request information, and performing the computer telephony integration control on the exchange unit based on the generated information; and

20 an exchange-unit communications function for communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution function and information relating to the exchange request
25 information.

101. A computer-readable storage medium used to direct a computer, which is a computer telephony integration client unit for transmitting computer telephony integration control request information for use in requesting computer telephony integration control to a computer telephony integration server unit, to perform:

a computer telephony integration control request information editing function for editing the computer telephony integration control request information;

a communications control function for communicating with the computer telephony integration server unit through a computer network the computer telephony integration control request information and information relating to the computer telephony integration control request information.

102. A computer readable storage medium used to direct a computer which is an additional connection server unit for receiving additional connection request information for use in requesting an additional connection to communications which have already been connected, and controlling a connection of an exchange line terminated by an exchange unit according to the additional connection request information to perform

the functions of:

terminating two or more extensions connected to
said exchange unit;

receiving the additional connection request
5 information from said client unit through a computer
network;

instructing the exchange unit to connect
according to the additional connection request
information an optional first extension among the
10 extensions to the communications being connected;

instructing the exchange unit to connect a second
extension which is another optional extension among
the extensions to a terminal unit specified according
to the additional connection request information; and

15 connecting the first and second extensions in an
additional connection server unit.

103. A computer readable storage medium used to direct
a computer which is an interruptive connection server
20 unit for receiving interruptive connection request
information for use in requesting an interruptive
connection to communications which have already been
connected, and controlling a connection of an exchange
line terminated by an exchange unit according to the
25 interruptive

connection request information to perform the functions of:

terminating two or more extensions connected to said exchange unit;

5 receiving the interruptive connection request information from said client unit through the computer network;

instructing the exchange unit to connect according to the interruptive connection request information an optional first extension among the
10 extensions to the communications being connected;

instructing the exchange unit to hold one of communicating terminal units;

instructing the exchange unit to connect a second
15 extension which is another optional extension among the extensions to a terminal unit specified according to the interruptive connection request information; and

instructing the extension termination means to
20 connect the first and second extensions.

104. A computer readable storage medium used to direct a computer which is a transfer control server unit for receiving transfer control request information for use
25 in requesting an entry or release of a call from a

client unit to an optional destination terminal unit,
and controlling a connection of an exchange line
terminated by an exchange unit according to the
transfer control request information to perform the
5 functions of:

terminating two or more extensions connected to
said exchange unit;

entering or releasing transfer control
information for the optional destination terminal unit
10 according to the transfer control request information
when the transfer control request information is
received from said client unit through a computer
network;

instructing the exchange unit according to the
15 transfer control request information to output a
destination specification request for requesting the
specification of a destination when a call is issued
to the optional destination terminal unit;

instructing the exchange unit to specify an
20 optional first extension among the extensions as the
call destination unit when the destination
specification request is output from the exchange
unit;

instructing the exchange unit to connect a second
25 extension which is another optional extension of the

extensions to a terminal unit specified according to the interruptive connection request information; and

instructing said extension termination means to connect the first and second extensions.

5

105. A computer-readable storage medium used to direct a computer, which is a computer telephony integration server unit for receiving exchange information from a computer telephony integration client unit, and performing computer telephony integration control to control a connection of an exchange circuit which terminates an exchange unit according to the exchange information, to perform:

15 a first communications control function for communicating electronic mail containing the exchange information with said computer telephony integration client unit through a computer network;

20 a computer telephony integration control execution function for receiving the electronic mail containing the exchange information from said computer telephony integration client unit through the computer network and said first communications control function, generating exchange request information for use in requesting the exchange unit to perform the
25 computer telephony integration control according to

the exchange information contained in the electronic mail, and performing the computer telephony integration control on the exchange unit based on the generated information; and

5 an exchange-unit communications function for communicating with the exchange unit the exchange request information transmitted by said computer telephony integration control execution function and information relating to the exchange request
10 information.

106. A computer-readable storage medium used to direct a computer, which is a computer telephony integration client unit for transmitting exchange
15 information for use in requesting computer telephony integration control to a computer telephony integration server unit, to perform:

 an electronic mail editing function for editing the electronic mail containing the exchange
20 information; and

 a communications control function for communicating with the computer telephony integration server unit through a computer network the electronic mail containing the exchange information.